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#Male mouse paramters (Table 3 Yang et al. 2012)
#Metabolism is based on deterministic estimates with Nelder-Mead
algorithm

parms <-c(
  BW = 0.03 ,      # Body weight
  QPC = 30. ,      # Unscaled Alveolar Vent
  QCC = 30. ,      # Unscaled Cardiac Output

  #FRACTIONAL BLOOD FLOWS TO TISSUES
  QLC = 0.161 ,    # Flow to Liver as % Cardiac Output
  QFC = 0.07 ,     # Flow to Fat as % Cardiac Output
  QSC = 0.15 ,     # Flow to Slow as % Cardiac Output
  QKC = 0.09 ,     # Flow to Kidney as % Cardiac Output (Brown et. al.
1997)

  #FRACTIONAL VOLUMES OF TISSUES
  VLC = 0.055 ,    # Volume Liver as % Body Weight
  VLUC = 0.007 ,   # Volume Lung as % Body Weight
  VFC = 0.1 ,      # Volume Fat as % Body Weight
  VRC = 0.08098 ,  # Volume Rapid Perfused as % Body Weight
  VSC = 0.384 ,    # Volume Slow Perfused as % Body Weight
  VKC = 0.0167 ,   # Volume Kidney as % Body Weight (Brown et. al. 1997)

  #PARTITION COEFFICIENTS PARENT
  PL = 1.25 ,      # Liver/Blood Partition Coefficient
  PLU = 2.38 ,     # Lung/Blood Partition Coefficient
  PF = 17.3 ,      # Fat/Blood Partition Coefficient
  PS = 0.58 ,      # Slow/Blood Partition Coefficient
  PR = 1.76 ,      # Rapid/Blood Partition Coefficient
  PB = 7.83 ,      # Blood/Air Partition Coefficient
  PK = 1.76 ,      # Kidney/Blood Partition Coefficient

  #KINETIC CONSTANTS
  MW = 88.5 ,      # Molecular weight (g/mol)
  # Metabolism in Liver
  VMAXC = 18.4492 , # Scaled VMax for Oxidative Pathway:Liver
  KM = 0.1204 ,    # Km for Oxidative Pathway:Liver
  # Metabolism in Lung
  VMAXCLU = 0.7726 , # Scaled VMax for Oxidative Pathway:Lung
  KMLU = 0.1770 ,  # Km for Oxidative Pathway:Lung
  KFLUC = 0.0 ,    # Pseudo-first order clearance in lung (Km
unidentifiable)
  # Metabolism in Kidney (YYang 2009)
  VMAXCKid = 0.0716 , # Scaled VMax for Oxidative Pathway:Kidney
  KMKD = 0.0443 ,   # Km for Oxidative Pathway :Kidney

  #DOSING INFORMATION
  TSTOP = 7.0 ,
  CONC = 0.0      # Initial concentration (ppm)

)

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